(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 9 June 2005 (09.06.2005)

PCT

(10) International Publication Number WO 2005/052409 A1

(51) International Patent Classification⁷: F16H 15/50, 15/52

(21) International Application Number:

PCT/GB2004/004764

(22) International Filing Date:

11 November 2004 (11.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0326596.4

14 November 2003 (14.11.2003) GF

- (71) Applicant (for all designated States except US): OR-BITAL TRACTION LTD [GB/GB]; 100 D Leciester Road, Hinkley, Leicestershire LE10 1LU (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): MILNER, Peter, James [GB/GB]; 100D Leicester Road, Hinckley, Leicestershire LE10 1LU (GB).
- (74) Agents: BRYER, Kenneth et al.; K. R. Bryer & Co, 7 Gay Street, Bath BA1 2PH (GB).

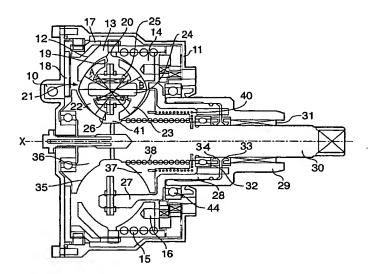
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

as to the identity of the inventor (Rule 4.17(i)) for all designations

[Continued on next page]

(54) Title: AN IMPROVED CONTINUOUSLY VARIABLE TRANSMISSION DEVICE



(57) Abstract: A continuously variable transmission device has planetary members (23) in rolling contact with radially inner and outer races (12, 14; 36, 37) each comprising axially spaced relatively axially movable parts, and control means (18) for determining the axial separation of the parts (12, 14) of one of the two races, in which the planetary members (23) are connected for drive transmission to an input or output member (30) of the transmission device by connection means which allows the radial position of the planets to vary in response to variation in the axial separation of the parts (12, 14) of the said one of the two races (37), and in which the generatrix of the curved surface (70, 71) of at least one of the races (37) and/or planetary members (23) is non-circular.



WO 2005/052409 A1

I BRIGE BINDEN I BERLIK HER BENJI BODO BINI IN IN BODI BONA HER KENI BODO BONE HON BEDIAR HER HER HER DO DI

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE,

BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.